

In re: Dube *et al.*
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REMARKS

Reexamination and reconsideration of this Application, withdrawal of the rejections, and formal notification of the allowability of all claims as now presented are earnestly solicited in light of the above amendments and remarks, which follow.

Claims 1-4 and 6-26 have been cancelled. New Claims 31-58 have been added. Support for the new claims may be found throughout the specification, and particularly on pages 4-8 and in the original claims. Claims 1-4 and 6-26 have been canceled to expedite allowance of the application. Applicants reserve the right to pursue those claims in a continuation application. It is believed that the above claim amendments add no new matter and place all claims in condition for allowance. As a result, entry of these amendments is respectfully requested.

Claims 1-4, 6-9, 13, and 23-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Anwar *et al.* (U.S. Patent No. 3,618,588) in view of Richards (U.S. Patent No. 5,454,874) and the *Encyclopedia of Food Science Technology and Nutrition* (EFSTN). Claims 15-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Anwar *et al.* in view of the EFSTN. The Office Action states that Anwar discloses a process for manufacturing caramel color which comprises heating the juice from fruit, which contains levulose, in the presence of a catalyst, which may be employed in the amount of between 4 and about 20 percent, and which can be chosen from an alkali catalyst, such as sodium hydroxide, under temperatures preferably ranging from about 222-350°F (105-176°C). Applicants respectfully traverse the above rejections as applied to the new claims.

Claims 1-4, 6-9, 13, and 15-24 have been cancelled making the rejections moot. Applicants, however, respectfully submit that the newly submitted claims are not obvious over the above-cited references. The newly submitted claims are directed to caramelization mixtures comprising a reducing sugar selected from a pure reducing sugar, high fructose corn syrup, a phosphate-substituted reducing sugar, or mixtures thereof. The Anwar reference only teaches the use of an unrefined fruit-based reducing sugar source; namely, fruit juice. Anwar teaches that a "high quality caramel color having high acid stability can be simply produced from the carbohydrate content of ordinary unrefined fruit and fruit juices" (see column 2, lines 8-11).

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Further, Anwar states the process of its invention employs carbohydrates that are in "natural, untreated fruit or the juice prepared from the fruit as the raw material" in its caramelization process (see column 2, lines 12-13).

Applicants respectfully submit that the carbohydrates taught for use in caramelization by Anwar do not encompass the reducing sugar as claimed in the present application as the carbohydrates taught by Anwar are not a pure reducing sugar, high-fructose corn syrup, or a phosphate-substituted reducing sugar. Instead, Anwar only teaches the use of fruit or fruit juice. Furthermore, in reference to high-fructose corn syrup, the Office specifically stated in the Action dated December 12, 2002, that the art of record (which included Anwar *et al.*, Richards, and the EFSTN) neither teaches nor suggests a method wherein the caramelization mixture is comprised of high fructose corn syrup. In light of the foregoing, Applicants request reconsideration and withdrawal of the above-described rejections.

Claims 10-12, 14, and 25-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Finberg (U.S. Patent No. 2,930,720) in view of the EFSTN and Zietlow *et al.* (U.S. Patent No. 6,180,158). Claims 10-12, 14, and 25-26 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Evers *et al.* (U.S. Patent No. 3,942,537) in view of the EFSTN and Zietlow *et al.*

The Office Action states that Finberg discloses the addition of a casing solution, which can include caramel, to a smokable filler material, that the EFSTN discloses producing caramel by heating sugar (which can be a hydrolyzed starch syrup) alone or with an additive (which can be sodium hydroxide), at a temperature range of 120-250°C, and that Zietlow teaches that high fructose corn syrup is an example of a hydrolyzed starch syrup. Accordingly, the Office Action alleges it would be obvious to flavor tobacco according to Finberg using caramel as taught by the EFSTN, wherein the hydrolyzed starch syrup is high fructose corn syrup as taught by Zietlow.

The Office Action also states that Evers teaches a method for improving the flavor of a smoking article, including adding a conventional flavorant, which can include caramel. Thus, the Office Action alleges that it would have been obvious to one of ordinary skill in the art to produce caramel used in Evers by the method taught in the EFSTN, wherein the hydrolyzed

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starch syrup is high fructose corn syrup as taught by Zietlow. Applicants respectfully traverse the above rejections as applied to the new claims.

Claims 10-12, 14, and 25-26 have been cancelled making the rejections moot.

Applicants, however, respectfully submit that the newly submitted claims are not obvious over the above cited references. The EFSTN reference, alone or in combination with any other reference, fails to teach or suggest the present invention. The Office states that the EFSTN teaches caramelization at a temperature between 120-250°C. The Office, however, fails to note the distinction made in the EFSTN between thermolysis of plain saccharides and thermolysis in the presence of a catalyst. The EFSTN teaches caramelization through hydrolysis of a saccharide in the presence of a hydroxide catalyst (page 662, col. 1-2), but only at temperatures at or below the range of 120-130°C (page 663, col. 1). The EFSTN specifically teaches away from thermolysis in the presence of a catalyst at temperatures above that range as being detrimental to the tinctorial strength and flavor of the caramel. In contrast, the present invention is directed at improving the flavor of a smoking article through application of a flavorful caramel composition. Such flavorful caramel composition is produced by heating an aqueous mixture of a reducing sugar and a non-amino base at a temperature in excess of the range of 120-130°C taught in the EFSTN. Specifically all of the newly submitted claims recite heat treatment of a reducing sugar and a non-amino base at a temperature of at least about 150°C. The EFSTN directly teaches away from such a method. Thus, the EFSTN, even if combined with Finberg and Zietlow, fails to teach or suggest the present invention. For the same reasons as stated above, the EFSTN, even if combined with the Zietlow and Evers references, fails to teach or suggest the present invention. Therefore, Applicants respectfully request reconsideration and withdrawal of these rejections.

Accordingly, it is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that no new matter has been added by this amendment and that all pending claims are now in condition for immediate allowance. It is requested that the Examiner telephone the

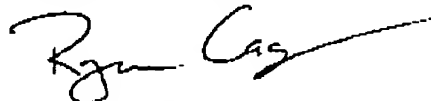
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undersigned should the Examiner have any comments or suggestions in order to expedite examination of this case.

It is not believed that extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR §1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

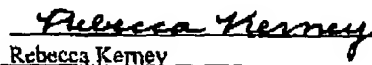


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Rebecca Kerney

7/9/03
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